GOVERNMENT OF INDIA
AGRICULTURE AND FARMERS WELFARE
LOK SABHA

UNSTARRED QUESTION NO:2279
ANSWERED ON:29.11.2016
Use of Polymer to Grow Crops
Rao (Avnthi) Shri Muthamsetti Srinivasa

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether Indian origin winner of Google Science Fair Prize has successfully created a low cost super absorbent polymer made out of waste products from the juice manufacturing industry and if so, the details thereof;

(b) whether this polymer is biodegradable and retain large amounts of water, keep soil moisture and improve crop growth without regular water supplements and if so, the details thereof; and

(c) whether the polymer is very effective in drought hit areas and being used by the farmers in Maharashtra and Telangana and if so, the details thereof?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE
(SHRI SUDARSHAN BHAGAT)

(a) It is reported that An Indian origin South African has won 'Google Science Fair Prize' for developing a low cost super absorbent polymer from orange peel containing polysaccharide.

(b) Based on the preliminary studies, it is claimed that the polymer is biodegradable. It can absorb about 76% of water, retaining about 300 times its weight in liquid relative to its own mass and have beneficial effect on plant growth parameters.

(c) Preliminary study also claims that there is likelihood of plants to sustain growth in drought condition. However, no systematic studies on the efficacy of this polymer on various crops and soil types in India have been reported.
****